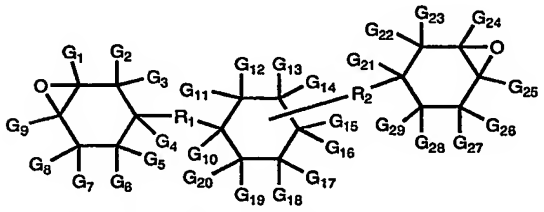
WHAT IS CLAIMED IS:

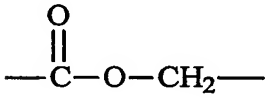
1. A method of enhancing the toughness of a coating on an article, said coating comprising a cured cycloaliphatic epoxy resin, said method comprising using as the epoxy resin a compound of the formula:



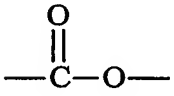
wherein R_1 and R_2 are divalent organic moieties that may be the same or different.

2. The method of Claim 1 wherein the cycloaliphatic epoxy resin comprises the reaction product of from about 40 to about 95 weight percent of a cycloaliphatic epoxide carboxylic acid ester and from about 5 to about 60 weight percent of the hydroxy functional compound.

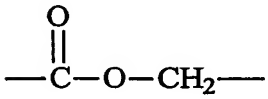
3. The process of Claim 1 wherein R_1 is



4. The process of Claim 1 wherein R_1 is

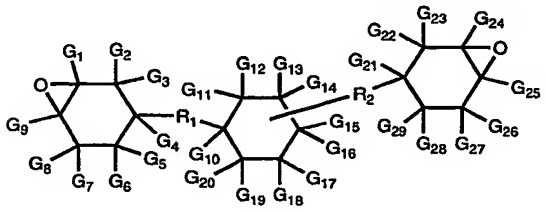


5. The cycloaliphatic epoxy resin of Claim 1 wherein R_1 and R_2 are each



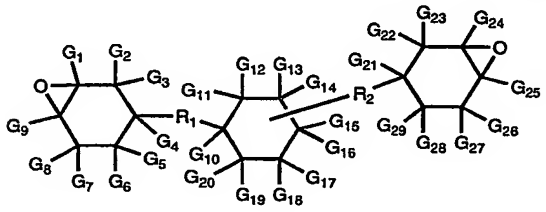
6. The cycloaliphatic epoxy resin of Claim 1 wherein each of G_{1-29} are hydrogen.

7. A photocurable composition comprising an effective amount of a photoinitiator, and an epoxy resin of the following formula:



wherein R_1 and R_2 are divalent organic moieties that may be the same or different.

8. A thermally-curable composition comprising an effective amount of a thermally-activated initiator, and an epoxy resin of the following formula:



wherein R_1 and R_2 are divalent organic moieties that may be the same or different.

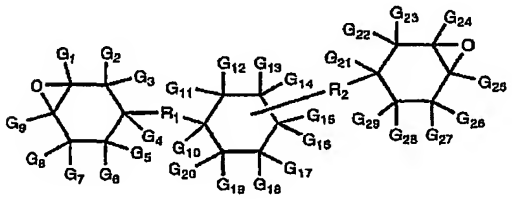
9. The composition of Claim 8 that is an LED encapsulant formulation.

AMENDED CLAIMS

[received by the International Bureau on 25 February 2005 (25.02.2005); original claims 1-9 replaced by amended claims 1-8 (2 pages)]

WHAT IS CLAIMED IS:

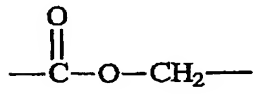
1. A method of enhancing the toughness of a coating on an article, said coating comprising a cured cycloaliphatic epoxy resin, said method comprising (a) applying a photocurable composition on said article; and (b) curing the photocurable composition; wherein the photocurable composition comprises an effective amount of a photoinitiator, and an epoxy resin compound of the following formula:



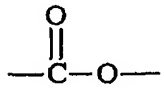
wherein R_1 and R_2 are divalent organic moieties that may be the same or different; and wherein G_1 through G_{29} is hydrogen; phenyl; or substituted or unsubtituted alkyl or alkene groups having from 1 to about 10 carbon atoms.

2. The method of Claim 1 wherein the cycloaliphatic epoxy resin comprises the reaction product of from about 40 to about 95 weight percent of a cycloaliphatic epoxide carboxylic acid ester and from about 5 to about 60 weight percent of the hydroxy functional compound.

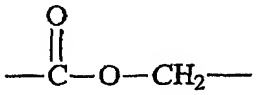
3. The method of Claim 1 wherein R_1 is



4. The method of Claim 1 wherein R_1 is

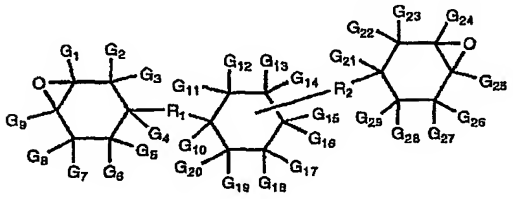


5. The method of Claim 1 wherein R_1 and R_2 are each



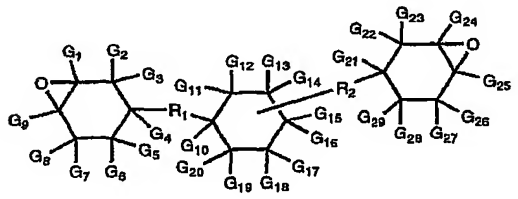
6. The method of Claim 1 wherein each of G_{1-29} are hydrogen.

7. A photocurable composition comprising an effective amount of a photoinitiator, and an epoxy resin of the following formula:



wherein R_1 and R_2 are divalent organic moieties that may be the same or different; and wherein G_i through G_{29} is hydrogen; phenyl; or substituted or unsubstitued alkyl or alkene groups having from 1 to about 10 carbon atoms.

8. A thermally-curable LED encapsulant formulation composition comprising an effective amount of a thermally-activated initiator, and an epoxy resin of the following formula:



wherein R_1 and R_2 are divalent organic moieties that may be the same or different; and wherein G_i through G_{29} is hydrogen; phenyl; or substituted or unsubstitued alkyl or alkene groups having from 1 to about 10 carbon atoms.